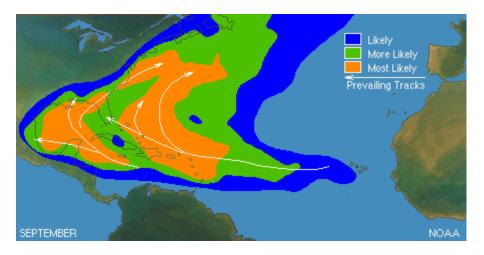


NOAA, NATIONAL WEATHER SERVICE, WEATHER FORECAST OFFICE Miami, Florida 33165

Tropical Storm/Hurricane Climatology

Mainland South Florida - September

September is the most active month for tropical activity in the Atlantic basin. However, for mainland South Florida, September ranks second behind October for the total number of tropical storms and hurricanes to impact the area. However, major hurricanes (Category 3 or higher) have hit South Florida most often during the month of September.



Since 1851, a total of 28 recorded tropical cyclones (tropical storms and hurricanes) have impacted mainland South Florida. This ranks second behind the month of October, when 30 tropical cyclones impacted the area. In September, there have been a total of 15 hurricanes impacting the local area, again second to October which has had 19 hurricanes.

Eleven major hurricanes have impacted mainland South Florida, the most of any month.

Here are brief summaries of the most notable major hurricanes that have impacted mainland South Florida during the month of September:

"The Great Miami Hurricane" - September 18, 1926

This storm was a classic "Cape Verde" hurricane, meaning it developed off the coast of Africa near the Cape Verde islands. This hurricane traversed the Atlantic while strengthening, reaching the Bahamas on the 17th and Miami on the 18th. The storm grew into a Category 4 hurricane, with sustained winds estimated at 150 mph, making landfall between Coral Gables and South Miami during the early morning of the 18th. This was the strongest hurricane to hit Dade County in the 20th century until Andrew in August 1992. A detailed report on the Great Miami Hurricane can be found here.

"The Okeechobee Hurricane" – September 16, 1928

This was another devastating hurricane which traversed the Atlantic, hitting Puerto Rico as a Category 5 hurricane on the 13th, then moving northwest and making landfall near West Palm Beach on the evening of the 16th. The most extensive damage along the coast occurred between Jupiter and Pompano Beach. This intense hurricane then moved over Lake Okeechobee before turning north then northeast across central and northern Florida. This hurricane caused a breach in the dike surrounding Lake Okeechobee, causing over 2,500 deaths. See the detailed report on this devastating hurricane <a href="https://example.com/here-example.com

September 15, 1945

This hurricane tracked north of Puerto Rico and Hispaniola, while intensifying into a major hurricane, then tracked across the Bahamas,

making landfall in the Homestead area on the afternoon of the 15th. Wind gusts were estimated at 150 mph in Homestead and 107 mph in Miami. Four people died from this hurricane. The Richmond Naval Air Base near present-day Metrozoo was heavily damaged by this hurricane. See a detailed report of this storm <u>here</u>.

September 17, 1947

This system formed near the Cape Verde islands, tracked across the Atlantic to the northern Bahamas, intensifying into a Category 4 hurricane over Abaco on the 16th with winds of 160 mph. The hurricane turned towards the west-southwest, making landfall at Pompano Beach on the 17th with sustained winds of 155 mph, a strong Category 4 hurricane. Hillsboro Inlet Light near Pompano Beach recorded sustained winds of 122 mph with gusts of 155 mph. This wind reading was the highest recorded winds in the state of Florida up until Hurricane Andrew of 1992. This hurricane tracked across the Everglades and exited the coast near Naples as a Category 2 hurricane. An 11-foot storm surge occurred along portions of the southeast Florida coast and a 20-foot storm surge occurred along portions of Lake Okeechobee, but the dike held to avert another serious disaster.

The combination of this hurricane and another one in October 1947 caused severe inland flooding which lingered for weeks and eventually led to the present-day canal system in south Florida.

The Florida Sentry has a first-hand account of this hurricane in the Pompano Beach area which can be found by going to this web site.

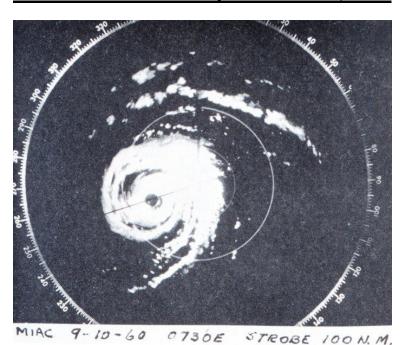
September 21-22, 1948

This hurricane developed in the northwest Caribbean Sea near Jamaica on September 18th and rapidly developed into a major hurricane before

passing over western Cuba on the 20th. The hurricane moved north over the Straits of Florida, passing over Key West early on the 21st, then turning northeast and making landfall on the Florida peninsula near Everglades City around midnight on the 22nd as a category 3 storm. The hurricane weakened slightly as it traversed the Everglades, passing between Clewiston and Belle Glade during the early morning on the 22nd, then moving off the Atlantic coast north of Stuart later on the 22nd.

Maximum sustained winds of 122 mph were recorded in Everglades City, with sustained hurricane force winds felt from Naples all the way across the state to Miami and Fort Lauderdale. The Lake Okeechobee area also experienced sustained hurricane force winds up to 100 mph. Rainfall amounts averaged from 8-12 inches, causing significant flooding over interior areas and around Lake Okeechobee. Three people died from the storm in Florida, 45 were injured and over 1,100 homes were either damaged severely or destroyed.

Hurricane Donna – September 9-10, 1960



The first major hurricane to hit Florida in a decade, Hurricane Donna was another classic Cape Verde hurricane which traveled west-northwest across the tropical North Atlantic before reaching the Straits of Florida on the 9th. Donna turned to the northwest and made landfall in the middle Keys in the early morning of the 10th with maximum sustained winds estimated at 140 mph, making Donna a category 4 hurricane. Donna continued northwestward and made a second landfall between Everglades City and Cape Romano later on the 10th. Donna hugged the southwest Florida coast throughout the day of the 10th, then turned north and northeast across central Florida.

Hurricane force winds affected much of the southern Florida peninsula, with sustained winds to near hurricane force as far north and east as Miami. Perhaps Donna's biggest impact came from the storm tides, which were estimated to be at least 7 feet above normal in the Everglades City/Naples area. Tides of 4 feet were experienced in the Miami area.

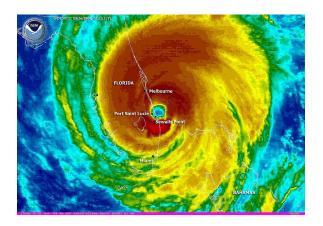
For a detailed account of Hurricane Donna's impacts on south Florida, please <u>visit this web site</u>.

Hurricane Betsy – September 7-8, 1965

Betsy took an unusual track toward south Florida. Betsy moved northwest as it skirted the northernmost Bahamas on the 3rd, then performed a loop about 400 miles south of Cape Hatteras on the 5th and began to move south. Betsy continued this south and eventually southwest motion, crossing back over the northwestern Bahamas and impacting south Florida and the Keys on September 7th as a Category 3 hurricane. The eye of Betsy passed west over the upper Keys and far southern peninsula, exiting the state at Cape Sable. Betsy pounded the lower southeast Florida coast with winds in excess of 100 mph and

storm tides in excess of 6 feet above normal. Total damage in Florida was estimated at over \$100 million. Go to this web site for additional information on Betsy.

Hurricane Jeanne – September 25, 2004



Jeanne moved across the Leeward Islands and Puerto Rico as a tropical storm, eventually intensifying into a hurricane east of the Bahamas on the 20th. Jeanne meandered east of the Bahamas for a few days, then finally began moving westward and making landfall on the Florida coast at Hutchinson Island, just east of Stuart at Category 3 strength. Hurricane Frances (Category 2) made landfall at this same location just 3 weeks earlier. Most of the impacts from Jeanne in south Florida were felt in the Palm Beaches and Lake Okeechobee area where gusts to hurricane force were felt, along with rainfall amounts of 8-10 inches. Jeanne was particularly damaging since it came in the wake of Frances which had impacted the same region with similar conditions just three weeks before. Total damage estimated for south Florida were in excess of \$300 million.

See more on Jeanne's impact on south Florida here.